

## AGENDA ITEM X-B (5-8)

Consideration of requests from Tarleton State University for 1) Associate of Applied Science (AAS) degrees with majors in a) Medical Laboratory Technology (MLT) and b) Histotechnology (HT), and 2) Advanced Technical Certificates (ATC) in a) Medical Laboratory Technology and b) Histotechnology

### RECOMMENDATIONS:

1. a.) Expansion of the Table of Programs of Tarleton State University to include associate-level authority in Medical Laboratory Technology

Approval and authorization to implement an Associate of Applied Science (AAS) degree with major in Medical Laboratory Technology

- b.) Expansion of the Table of Programs of Tarleton State University to include associate-level authority in Histotechnology

Approval and authorization to implement an Associate of Applied Science (AAS) degree with major in Histotechnology, contingent upon notification to the Commissioner that appropriate faculty have been hired for the degree program

2. a.) Approval and authorization to implement an Advanced Technical Certificate (ACT) in Medical Laboratory Technology

- b.) Approval and authorization to implement an Advanced Technical Certificate (ACT) in Histotechnology, contingent upon notification to the Commissioner that appropriate faculty have been hired for the certificate program

Goals: Participation, Success, Excellence

The staff believes this item will contribute to reaching the state's goals for increased participation, success, and excellence.

## **BACKGROUND AND PROGRAM DESCRIPTION**

Medical Laboratory Technicians (MLT) and Histotechnicians (HT) are medical laboratory professionals who provide physicians with information to assist in the diagnosis and treatment of disease. MLTs perform laboratory analysis on blood and body fluids; HTs process tissue samples for pathologists to analyze. MLT and HT associate and certificate programs are high-cost, low-enrollment programs that are difficult for small colleges to afford. This worsens the severe shortage of medical laboratory personnel in rural areas.

As part of its mission to serve the needs of the rural communities within their service area, Tarleton State University (TaSU) proposes to offer Associate of Applied Science (AAS) degrees and Advanced Technical Certificates (ATC) in Medical Laboratory Technology and Histotechnology. TaSU has strong community support for the proposed programs. Students would complete their prerequisite science and general education courses at their local community colleges and then transfer to TaSU to complete the required technical courses in the major. TaSU would partner with 13 community colleges, each expected to provide one to three students per year to the proposed programs. Students also could complete their academic prerequisite courses at TaSU or at other colleges or universities. Flexible scheduling at TaSU would allow students to enter the proposed programs in any given semester, on either a full-time or part-time basis. Total curricular requirements for the AAS degrees would be 70-72 semester credit hours (SCH) and for the Advanced Technical Certificates would be 37 SCH. (Students would enter the curricula for the Advanced Technical Certificates with associate or baccalaureate degrees.)

TaSU currently offers a baccalaureate degree in Clinical Laboratory Science. For over 10 years, program graduates have earned 100 percent pass rates on the national examination for certification in medical technology. Graduates of the proposed degree and certificate programs would be eligible for admission to this degree program. TaSU also has planning authority to offer the master's degree in Clinical Laboratory Science, with implementation targeted for fall 2005. Ultimately, the proposed and current programs at TaSU would allow students from central and north Texas to progress from high school through the master's degree (see institution's flow chart), with the possibility of articulating through the doctorate at other universities or health science centers. Having these programs linked would likely improve the availability of faculty for laboratory medicine programs.

## **NEED**

### *Employment Opportunities*

There is a severe shortage of medical laboratory personnel both nationally and statewide. The U.S. Department of Labor has predicted an annual shortfall of 4,000 laboratory professionals through 2008. Vacancy rates for MLTs are about 14 percent both nationally and in the West South Central region (including Texas). Vacancy rates for Histology are around 16 percent nationally and 14 percent in the West South Central region. The Dallas-Ft. Worth Hospital Council showed Histology 2003 vacancy rates at about 14 percent, compared with about 8 percent in 2002. (The Council considers a 9 percent vacancy rate to be a crisis level.)

Effective January 1, 2005, on-the-job trained Histology personnel no longer will be eligible for certification without 60 collegiate semester credit hours.

### *Projected Enrollment*

TaSU expects to enroll 16 MLT and 16 HT students in the technical component of the programs.

*Existing State Programs*

There are 20 public AAS MLT programs in Texas, two of which are within 50 miles of TaSU. There are three certificate and one AAS HT programs in public institutions in Texas. However, there are no HT programs within a 200-mile radius of TaSU.

**QUALITY AND RESOURCES**

*Faculty*

The Department of Clinical Laboratory Science at TaSU currently has six medical technology faculty. TaSU would expand the contracts of two part-time faculty to full-time and would hire 2.5 additional faculty (1 MLT and 1.5 HT). Hiring 1.5 new faculty for the HT program would be critical for HT program success. (\$835,000 five-year costs: \$417,500 for the MLT program and \$417,500 for the HT program)

No new faculty would be needed for the partnering colleges.

*Other Personnel*

Additional part-time clerical staff would be required. (\$27,000 five-year costs: \$15,000 for the MLT program and \$12,000 for the HT program)

*Facilities and Equipment*

TaSU has a new \$2 million building that would house the proposed programs. This facility includes a new \$200,000 histotechnology/cytotechnology laboratory. These resources (in addition to the current equipment budget) would be sufficient to support the programs.

*Library, Supplies, Materials*

TaSU has excellent library facilities and instructional materials. The current library budget would be adequate to expand holdings without the need for additional funds.

TaSU would need additional supplies and materials for the proposed programs. (\$120,000 five-year costs: \$60,000 for the MLT program and \$60,000 for the HT program)

*Clinical/Internship Sites*

TaSU has 15 clinical affiliates, including the Baylor Healthcare System.

*Accreditation*

TaSU would pursue accreditation for these proposed programs from the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), which accredits the baccalaureate program in Clinical Laboratory Science.

MLT graduates would be eligible to take certification exams from the American Society for Clinical Pathology (ASCP) and/or the National Credentialing Agency for Laboratory Personnel (NCA). HT graduates would be eligible to take the ASCP certification exam.

*Educator Certification Program*

TaSU is rated “accredited” by the State Board for Educator Certification.

<b>FIVE-YEAR COSTS (TaSU<sup>1</sup>, MLT &amp; HT)</b>		<b>SOURCES OF FUNDING (TaSU<sup>1</sup>, MLT &amp; HT)</b>	
Personnel	\$862,000	Reallocated Funds	\$207,000
Facilities and Equipment	\$0	Anticipated New Formula Funding	\$333,000
Library, Supplies, and Materials	\$120,000	Special Item Funding	\$0
Other - Accreditation	\$15,000	Other – Tuition and Fees	\$567,000
<b>Est. 5-Year Costs</b>	<b>\$997,000</b>	<b>Est. 5-Year Revenues</b>	<b>\$1,107,000</b>

**The Chief Executive Officer of the institution has certified, and staff has determined, that the institution would have funds sufficient to support the proposed program. Because of the current economic hardships of the state, the staff re-confirmed the institution’s financial and resource commitments to the program at the time these materials were written (March 2004).**

Estimated formula funding generated by TaSU in years three through five would total \$424,000.

<sup>1</sup> Note that cost and funding figures for TaSU reflect the technical component of the programs. Costs for the first year of the programs (which provide students with science and general education course requirements) would be absorbed by the college partners.